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laterally; apex black; venter brownish and black, segments 2, 3 and 4 with a yellow spot on each side.

Covered with a pale whitish or silvery thin pubescence, quite abundant but nowhere hiding the surface, longest and most abundant on the head and venter.

Habitat. — Las Cruces, N. Mexico, 25 September, 1895, on staminate flowers of *Croton neomexicanum* (Cockerell).

DESCRIPTIONS OF NEW HYMENOPTERA FROM JAPAN. — II.

BY WILLIAM H. ASHMEAD, M.A., D.Sc.

WASHINGTON, D. C.

(PLATES VII AND VIII.)

Family LXI, TORYMIDÆ.

Subfamily V, MEGASTIGMINÆ.

Genus **MEGASTIGMUS** Dalman.

Megastigmus japonicus, new species.

Female. — Length, 2.5–3 mm.; ovipositor two thirds the length of the abdomen. Uniformly brownish-yellow, the sclerite between the parapsides and the tegulæ with a black or dusky spot, the abdomen with some brownish stains towards base above, the sheaths of the ovipositor black; eyes brown; ocelli black; flagellum pale brownish, the scape, pedicel, and legs yellowish. Wings hyaline, the veins, except the stigmal vein and its large knob which are brown-black, yellowish. The pronotum and the mesonotum are very finely transversely wrinkled, the scutellum feebly punctate, with a medium impressed line anteriorly and a cross-furrow before apex.

Type. — No. 7149, U. S. National Museum.

Japan (exact locality not given). Mr. A. Koebele; Gifu, taken in October by Mr. Y. Nawa, labelled No. 68.

Described from ten specimens, eight taken by Mr. Koebele and two taken by Mr. Nawa.

Megastigmus koebelei, new species.

Female. — Length, 2.5 mm., ovipositor as long as the abdomen. Uniformly brownish-yellow, immaculate, the ocelli dark, the eyes brown, the sheaths of the ovipositor black, the flagellum light brown, the scape and the legs pale yellowish. The pronotum above and the lobes of the mesonotum are delicately transversely wrinkled. Wings hyaline, the veins light brown, the large rounded knob of the stigmal vein brown-black.

Type. — No. 7150, U. S. National Museum.

Atami. Described from a single specimen received from Mr. A. Koebele and labelled No. 1558, evidently bred.

Family LXII, CHALCIDIDÆ.

Subfamily I, LEUCOSPIDINÆ.

Genus **LEUCOSPIS** Fabricius.

Leucospis japonica Walker.

A female and male of this species were received from Dr. Mitsukuri. The male was unknown to Walker; it differs from the female in having no yellow band at the apex of the scutellum, the two minute yellow spots on the disk of the pronotum, so conspicuous in the female are wanting, while the abdomen has two yellow bands—a band at the apex of the second and the third segments, two yellow dots on the disk of the first segment and a yellow dot at the apex of the last segment.

Type ♂ — No. 7151, U. S. National Museum.

Gifu. Described from a male, accompanied with a female, received from Dr. Mitsukuri, which I am informed by Mr. Marlatt, were taken by Mr. Y. Nawa, of Gifu.

Subfamily II, CHALCIDINÆ.

TRIBE I, CHALCIDINI.

Genus **CHALCIS** Fabricius.

The species known from Japan falling in this genus are *C. formosensis* Ashm., *C. mitsukurii* Ashm., *C. chinensis* Ashm., *C. euplææ* Westw., *C. obscura* Walk. and *C. mikado* Cam. (= *C. callipus* Kirby).

TRIBE II, SMICRINI.

Genus **EPITRANUS** Walker.

Epitranus albipennis Walker.

Hiogo.

TRIBE III, CHALCITELLINI.

Genus **ANACRYPTUS** Kirby.

To this genus belongs *Epitranus erythrogaster* Cam. described from Nagasaki.

Anacryptus japonicus, new species.

Male. — Length, 4.2 mm. Black and shining, but closely punctate, except on the mesonotum and the scutellum, where the punctures are larger and sparser; tips of

femora, the hind trochanters and hind tibiae behind reddish, the base and apex of front and middle tibiae, and all tarsi, honey-yellow; scape very long, slender, honey-yellow, the flagellum filiform, brown-black; petiole of abdomen long, longitudinally furrowed, a little longer than the hind femora, opaquely shagreened, the body of abdomen highly polished, shining, not large, subovate and compressed. Wings hyaline, almost bare, the veins brown, the stigmal vein very short, the postmarginal not developed.

Type. — No. 7155, U. S. National Museum.

Hakone. Described from one specimen collected by Mr. A. Koebele.

Anacryptus koebelei, new species.

Female. — Length, 3 mm. Black and shining, closely punctate, except on the middle mesothoracic lobe where the punctures are not so close; front and middle legs, including the coxae, honey-yellow, all tarsi pale, hind coxae black, the hind femora brown-black, the hind tibiae pale on posterior face. Wings hyaline, the veins yellowish the very small stigmal vein brownish. The abdominal petiole in this species, is shorter than the hind femora, longitudinally furrowed, while the body of the abdomen is long ovate, subcompressed, highly polished, the basal segment occupying nearly its whole surface, the following segments all very short.

Type. — No. 7161, U. S. National Museum.

Hakone. Described from one specimen collected by Mr. A. Koebele.

TRIBE IV, HALTICHELLINI.

Genus STOMATOCERAS Kirby.

To this genus belongs *Halticella tinctipennis* Cam. described from Nagasaki. The following species are apparently undescribed.

Stomatoceras hakonensis, new species.

Female. — Length, 6.5 mm. Wholly black, shining, punctate, clothed with a sparse glittering grayish or whitish pubescence, the scutellum with a median longitudinal furrow, the mesopleura coarsely longitudinally striated, the head deeply and broadly excavated in front, the excavation encircled by a rim or carina, the front ocellus placed within the excavation. Wings subfuscous, paler basally, the veins black. The abdomen is conic-ovate, not longer than the thorax, smooth and shining, except the sixth segment which has some distinct thimble-like punctures.

Type. — No. 7157, U. S. National Museum.

Hakone. Described from a single specimen collected by Mr. A. Koebele.

Stomatoceras clavicornis, new species.

Male. — Length, 3-3.5 mm. Black, closely punctate, clothed with a sparse, glittering white pubescence, the central longitudinal furrow on the scutellum only vaguely defined, the mesopleura punctate, not longitudinally striated; flagellum

strongly clavate, black, except basally, the scape and the two or three basal joints of the flagellum being pale or yellowish; tegulæ, middle coxæ, base and tips of front and middle femora, tibiæ and tarsi and hind tarsi, honey-yellow or testaceous, the rest of the front and middle femora and the hind legs brownish or brown-black the hind legs darkest, sometimes black. Wings hyaline, the veins brown. The abdomen is oval, shining, the third segment, and those beyond, faintly, microscopically punctate.

Type. — No. 7158, U. S. National Museum.

Hakone (Mr. A. Koebele).

Family LXIII, EURYTOMIDÆ.

Subfamily I, AXIMINÆ.

Representatives of this group should be found in Japan.

Subfamily II, EURYTOMINÆ.

TRIBE I, ISOSOMINI.

Genus ISOSOMA Walker.

To this genus belongs *Eurytoma antica* Walk., described from Hiogo.

TRIBE II, EURYTOMA Illiger.

Eurytoma appendigaster Swederus.

I have received specimens of this species from Yokohama and Gifu.

Eurytoma nikkoensis, new species.

Female. — Length, 2.4 mm. Black, shallowly umbilicately punctate, the middle mesothoracic lobe anteriorly almost smooth, shining; front legs from base of femora, the middle legs from apical half of femora, and the hind knees, tips of their tibiæ and the tarsi, honey-yellow; wings hyaline, the veins light brown, the marginal vein about one half longer than the stigmal vein, the postmarginal vein delicate, hardly longer than the stigmal. The head is considerably wider than the thorax; antennæ, except a yellow annulus at apex of the pedicel, wholly black, the flagellar joints oblong oval, the first the longest, the others gradually shortening; abdomen ovate, pointed at apex, not longer than the thorax, smooth and shining, subcompressed, the petiole short transverse; the body of the abdomen seen from the side is only a little more than twice as long as wide. The pronotum is only a little wider than long.

Type. — No. 7159, U. S. National Museum.

Nikko. Described from a single specimen collected by Mr. A. Koebele.

Eurytoma atamiensis, new species.

Female. — Length, 1.8 mm. Black, the head and thorax umbilicately punctate; scape of antennæ and the legs, except the hind coxæ and the hind femora,

brownish-yellow; abdomen ovate, ending in a point, smooth and shining, seen from the side it is hardly twice as long as wide; wings hyaline, the veins light brown, the marginal vein nearly twice as long as the stigmal; flagellum brown, the joints 2 to 5, moniliform. The pronotum is twice as wide as long.

Type. — No. 7160, U. S. National Museum.

Atami. Described from seven specimens collected by Mr. A. Koebele.

***Eurytoma japonica*, new species.**

Female. — Length, about 4 mm. Black, the head and thorax umbilicately punctate, clothed with a fine, sparse, whitish pubescence; scape of antennæ and the legs, except the coxæ, honey-yellow, the coxæ black, the incisions of the joints, apices of the tibiæ and the tarsi yellowish-white; flagellum brown-black, the joints oblong, the first about two and one half times as long as thick, the second about twice as long as thick, the following very gradually shortening; wings hyaline, the veins brownish-yellow, the marginal vein nearly twice as long as the stigmal; abdomen ovate, not ending in a projecting point at apex, smooth and shining, seen from the side, a little more than twice as long as wide, only slightly compressed. The pronotum is shorter than the mesonotum, about one and one half times as wide as long.

Type. — No. 7161, U. S. National Museum.

Sapporo. Described from a single specimen received from Dr. Matsumura.

***Eurytoma binotata*, new species.**

Female. — Length, 1.5–2 mm. Resembles *E. atamiensis*, but the pronotum is only one and one half times as wide as long, with a small yellow spot at each anterior angle, the legs are brownish-yellow, with all coxæ and the hind femora black, while the stigmal vein is only two thirds the length of the marginal vein.

Type. — No. 7162, U. S. National Museum.

Atami. Many specimens collected by Mr. A. Koebele.

***Eurytoma hakonensis*, new species.**

Female. — Length, 2.5 mm. Black, umbilicately punctate, but with the face, cheeks and pronotum, except medially, more or less yellow or brownish-yellow; scape of antennæ and legs yellowish, the tarsi whitish, the hind coxæ black, the hind femora brown, except at base and apex; flagellum light brownish, the joints 2–5 moniliform; wings hyaline, the veins yellowish, the marginal vein only a little longer than the stigmal; abdomen short ovate, much shorter than the thorax and only about one and one half times as long as wide. The pronotum is not quite twice as wide as long.

Type. — No. 7168, U. S. National Museum.

Hakone. Described from two specimens collected by Mr. A. Koebele.

***Eurytoma mitsukurii*, new species.**

Female. — Length, 3 mm. Mostly brownish-yellow, the eyes, a transverse line on vertex enclosing the ocelli, the occiput, three lines on the pronotum, a spot on

each mesothoracic lobe, a central stripe on the scutellum and the apices of the dorsal abdominal segments black; wings hyaline, the veins yellowish, the marginal vein very thick, not longer than the stigmal vein. The head anteriorly is deeply excavated for the reception of the antennæ, the flagellum is filiform, joints 2-6, a little longer than thick, the first the longest joint; the pronotum is a little more than twice wider than long; while the hind tibiæ are armed behind with some stiff bristles as in the *Decatomini*.

Type. — No. 7164, U. S. National Museum.

Atami. Described from a single specimen taken by Mr. A. Koebele.

Tribe V, DECATOMINI.

Genus DECATOMA Spinola.

Decatoma atamiensis, new species.

Female. — Length, 1.5 mm. Head, except the vertex and the occiput, the antennæ, the tegulæ, the mesopleura, and the legs, except a spot towards the apex of the hind femora and most of the hind tibiæ, yellow; the vertex, occiput, rest of the thorax, a spot on hind femora towards apex, and the hind tibiæ, except the apical fourth and a narrow annulus at base, black. Wings hyaline, the veins, except the semicircular stigma, which is brown-black, pale yellowish; there is a subfuscous fascia extending from the stigma to beyond the middle of the wing.

Type. — No. 7165, U. S. National Museum.

Atami. Described from one specimen collected by Mr. A. Koebele.

Family LXIV, PERILAMPIDÆ.

Genus PERILAMPUS Latrielle.

Perilampus japonicus, new species.

Female. — Length, 4 mm. Head, legs, except the tarsi, and the abdomen blue-black, smooth and shining; tarsi honey-yellow; thorax æneous-black, the dorsum with a greenish tinge, coarsely, closely punctate, except the lateral mesothoracic lobes which are smooth and shining, scape and pedicel æneous; flagellum brown-black, a little paler or brown at apex; wings hyaline, the veins brown.

Male. — Length, 2.5 mm. Agrees with female, except in size, and in having the head and scutellum metallic greenish, the legs æneous-black, the tarsi longer and slenderer, light brownish.

Type. — No. 7166, U. S. National Museum.

Sapporo. Described from a ♀ and ♂, labelled No. 15, received from Dr. Matsumura.

Family LXV, EUCHARIDÆ.

Genus SCHIZASPIDIA Westwood.

Schizaspidia tenuicornis, new species.

Female. — Length 4 mm. Head and thorax metallic-green, the abdomen black, the petiole yellow at apex; mandibles, antennæ and legs, except the hind coxæ,

light brownish-yellow, the tarsi paler; wings hyaline, the marginal and short stigmal vein brown, the latter enclosed in a small, fuscous cloud. The head, except some longitudinal striæ on the face, is smooth; the antennæ are long, the joints of the flagellum being rather long and cylindrical, the first joint about six times as long as thick; the thorax is coarsely rugose, with distinct parapsidal furrows, the scutellum produced at apex and ending in two short prongs; the abdomen is longly petiolated, the petiole being longer than the hind femora, smooth and shining, brown or brown-black with its apex yellow, while the body of the abdomen is ovate, a little more than twice longer than thick.

Type. — No. 7167, U. S. National Museum.

Sapporo. Described from two specimens (one imperfect) received from Dr. Matsumura.

Family LXVI, MISCOGASTERIDÆ.

Subfamily II, TRIDYMINÆ.

Genus **TRIDYMUS** Ratzeburg.

Tridymus hakonensis, new species.

Female. — Length, 1.5 mm. Æneous-black, smooth, the head anteriorly, the middle mesothoracic lobe, and the scutellum brassy; legs æneous, the tibiæ brown, the tarsi yellowish; wings hyaline, the veins brown; abdomen conic-ovate, subcompressed, pointed at apex, the sides metallic-greenish.

Type. — No. 7180, U. S. National Museum.

Hakone. Described from two specimens collected by Mr. A. Koebele.

Subfamily III, MISCOGASTERINÆ.

Tribe I, HALTICOPTERINI.

Genus **HALTICOPTERA** Spinola.

Halticoptera laticeps, new species.

Male. — Length, 2.6 mm. Robust, blue-black, the dorsum of the thorax dull bronzed; scape of antennæ, the mandibles, except the teeth and the legs, except the coxæ, honey-yellow, the tarsi pale yellowish, the femora medially more or less brownish; wings hyaline, the veins brown, abdomen bluish. The head is very wide, fully four times as wide as thick antero-posteriorly, the space between the eyes being very wide, the ocelli pale, arranged in an obtuse triangle; flagellum brown-black, the joints, except the first and second, a little wider than long.

Type. — No. 7181, U. S. National Museum.

Hakone. Described from one specimen received from Mr. A. Koebele.

Family LXVIII, ENCYRTIDÆ.

Subfamily I, EUPELMINÆ.

Tribe I, EUPELMINI.

Genus CALOSOTER Walker.

Calosoter albitarsis, new species.

Female. — Length, 2.4 mm. Head, except the eyes, the antennæ and the thorax, except a streak at each side of the mesonotum, the scutellum, the mesopleura and the metanotum which are metallic brown-black, brownish-yellow; legs, except the tarsi and hind femora and tibiæ, brownish-yellow, the tarsi, except last joint, and the apical third of hind femora, white, rest of hind femora and the hind tibiæ, black; wings hyaline, the veins light brown, the marginal vein very long and slender; abdomen conic-ovate, longer than the thorax, compressed, pointed at apex, and with a bronzed metallic tinge.

Type. — No. 7172, U. S. National Museum.

Atami. Described from three specimens collected by Mr. A. Koebele.

Genus ANASTATUS Motschulsky.

Anastatus japonicus, new species.

Female. — Length, 2 mm. Head and thorax closely, finely punctulate, gold-green, the frontal furrow with a bluish tinge, the collar bluish or violaceous, the mesopleura posteriorly brownish; antennæ brown-black, the scape at base and beneath, the sutures of the trochanters, middle coxæ beneath, base of their tibiæ and the tibial spurs, yellow, rest of legs brown-black, the hind legs æneous-black; abdomen black, with a yellowish band at base beneath. Wings with the apical two thirds fuscous, the basal one third and a curved band across from the stigmal vein hyaline or whitish.

Male. — Length, 1.6 mm. Æneous black, the head and sides of thorax tinged with blue, the disk of the mesothorax metallic-green, the parapsidal furrows deep, distinct, the abdomen black; legs æneous-black, the front tibiæ and tarsi light brown, an annulus at base of the tibiæ and the hind tarsi, white. Wings clear hyaline, the veins brown, the stigmal vein about one third the length of the submarginal vein, the stigmal vein about one third the length of the marginal and ending in a little knob, the postmarginal fully two thirds the length of the marginal. The antennæ are black or brown-black, the flagellum long, filiform, densely pubescent, the joints nearly twice as long as thick.

Type. No. 7168, U. S. National Museum.

Atami. Described from several specimens received from Mr. A. Koebele.

Anastatus gastropachæ, new species.

Female. — Length, 1.8–2 mm. Head metallic-bronzed green, the thorax brownish-yellow, the middle mesothoracic lobe blue, the abdomen æneous black; scape of antennæ and the legs brownish-yellow, the tarsi pale, the middle tibiæ more or less

fuscous; flagellum long, subclavate, fuscous or brown-black; wings much abbreviated and narrowed, fuscous, with a transverse band at base and apical third hyaline.

Type. — No. 7169, U. S. National Museum.

Sapporo. Described from four female specimens received from Dr. Matsumura, and bred from the eggs of a Lepidopteron, *Gastropacha* sp.

Anastatus brevipennis, new species.

Female. — Length, 3 mm. Æneous-black, the disk of the mesonotum and the abdomen with a bluish tinge, the latter with a white band at base; scape of antennæ and legs, except as noted, brownish-yellow, coxæ and femora brown, the hind tibiæ more or less fuscous; flagellum subclavate, brown-black; wings much abbreviated, narrowed, the apical two thirds fuscous, but divided by a transverse white band; the base of the wings hyaline.

Type. — No. 7170, U. S. National Museum.

Gifu. Described from two specimens received from Mr. Y. Nawa.

Anastatus albitarsis, new species.

Female. — Length, 2 mm. Metallic-greenish, the abdomen æneous-black, with a white band at base; antennæ brown-black; legs æneous-black, the trochanters and tibiæ brown, the tips of the tibiæ and the tarsi yellowish; wings fuscous, the tips paler, the basal fourth hyaline, the fuscous part with two white triangular spots vis-a-vis.

Type. — No. 7171, U. S. National Museum.

Hakone. Described from a single specimen collected by Mr. A. Koebele.

Genus EUPELMUS Dalman.

Eupelmus formosæ, new species.

Female. — Length, 2.8 mm. Ovipositor projecting, yellowish with the tip black. Bronzed green, the collar and the prosternum and the anterior part of the mesosternum bluish; scape of antennæ and the legs, except as noted, brownish-yellow, the tarsi paler, the hind coxæ æneous-black, the hind femora metallic brown at basal two thirds; wings hyaline, the veins light brown, the marginal vein very long, about four times as long as the stigmal.

Type. — No. 7173, U. S. National Museum.

Formosa. Described from a single specimen collected by Mr. A. Koebele.

Subfamily II, ENCYRTINÆ.

Tribe III, MIRINI.

Genus COPIDOSOMA Ratzeburg.

Copidosoma japonicum, new species.

Male. — Length, 1 mm. Æneous black, the mesonotum with a metallic-greenish tinge, smooth, impunctate; antennæ black, the flagellum subclavate; legs

brown, an annulus at base of front and middle tibiae and the tarsi, pale yellowish; wings hyaline, the marginal vein punctiform, brown.

Type. — No. 7174, U. S. National Museum.

Gifu. Described from eight specimens received from Mr. Y. Nawa.

Genus **APHYCUS** Mayr.

Aphycus albopleuralis, new species.

Female. — Length, 1.5 mm. Head, except the eyes, the antennae, except at apex, the prothorax, mesopleura and the legs waxy white, the mesonotum and the scutellum yellowish-brown; abdomen yellowish with some brownish stains on disk above; wings hyaline, the veins pale.

Type. — No. 7176, U. S. National Museum.

Gifu. Described from two specimens received from Mr. Y. Nawa.

Genus **MICROTERTYS** Thomson.

Microterys japonicus, new species.

Female. — Length 1.2 mm. Yellowish-brown, the disk of the abdomen towards base tinged with brown; scape, pedicel and legs pale yellowish; funicle joints 1 to brown, 2 and 6 pure white, the club black or fuscous; wings hyaline with three transverse fuscous bands, the first very broad, the second narrow, the third at the apical fourth of the wing, with a small triangular hyaline spot on its outer margin near the apex of the wing.

Type. — No. 7177, U. S. National Museum.

Gifu. Described from three specimens received from Mr. Y. Nawa.

Genus **SYRPHOPHAGUS** Ashmead.

Syrphophagus nigrocyaneus, new species.

Female. — Length, 1.5 mm. Blue-black, the head with some sparse punctures on the vertex; antennae brown-black; legs brown-black, the knees, tips of tibiae of the front and hind legs and all tarsi pale yellowish, the middle tibiae, except a pale annulus at base, fuscous; wings hyaline, the marginal and stigmal veins brown.

Type. — No. 7778, U. S. National Museum.

Japan. Described from one specimen collected by Mr. A. Koebele, but without an exact locality label.

Genus **TACHINÆPHAGUS** Ashmead.

Tachinæphagus fuscipennis, new species.

Female. — Length, 1.6 mm. Dark blue, the head and thorax sparsely, microscopically punctate; antennae brown-black, the flagellum clavate, the funicle joints transverse, the club large; wings fuscous, the basal third hyaline, the subcostal vein, except at apex, yellowish, the apex of the subcostal vein, the marginal, stigmal and postmarginal veins brown; legs dark brown or fuscous, the knees, tips of tibiae and the tarsi pale yellowish or whitish.

Type. — No. 7182, U. S. National Museum.

Atami and Hakone. Many specimens collected by Mr. Albert Koebele.

Genus CHEILONEURUS Westwood.

Cheiloneurus japonicus, new species.

Female. — Length, 1.6 mm. Yellowish-brown, the head on the vertex and the hind margin of mesonotum (broadly) metallic-bluish, the latter clothed with a silvery white pubescence, the abdomen metallic-greenish; last six joints of antennæ dilated, black and very pubescent; front wings with the apical two thirds dark fuscous, the basal third and the hind wings hyaline; legs brownish-yellowish, the tips of the middle femora, a spot at base of their tibæ and the hind femora and tibæ, except a white annulus at base, fuscous.

Type. — No. 7183, U. S. National Museum.

Gifu. Described from three specimens, labelled No. 85, received from Mr. Y. Nawa.

Genus CERAPTEROCEROIDES Ashmead.

Cerapteroceroides, new genus.

In having the wings marked with fuscous rays this genus agrees with *Cerapterocerus* Westw. and *Habrolepis* Först., but from the former it is easily separated by the head which is not oblong but short or lenticular; while from the latter it is separated by the antennæ which are strongly compressed or dilated, ribbon-shaped.

Cerapteroceroides japonicus, new species. (Plate VII, Fig. 2).

Female. — Length, 2 mm. Æneous black, with a bluish tinge, some specimens being peacock-blue; antennæ strongly compressed, dull black, the scape brownish; wings with fuscous rays as in *Habrolepis*; legs æneous black, the tips of the tibæ and the tarsi, pale yellowish, the front tarsi whitish.

Type. — No. 7179, U. S. National Museum.

Atami (Mr. A. Koebele) and Gifu (Mr. Y. Nawa).

Family LXIX, PTEROMALIDÆ.

Subfamily I, PTEROMALINÆ.

Tribe III, EUTELINI.

Genus PLATYTERMA Walker.

Platyterma atamiense, new species.

Female. — Length, 1.5 mm. Bluish-green, the head and thorax shagreened; scape, pedicel and legs, except coxæ, honey-yellow; flagellum subclavate, not long, the funicle joints 2 to 6 wider than long; abdomen æneous black, conic-ovate, pointed at apex, a little shorter than the thorax. Wings hyaline, the veins light brown, the

marginal vein not short, the stigmal vein rather long, clavate about two thirds the length of the marginal, the postmarginal vein longer than the stigmal.

Type. — No. 7184, U. S. National Museum.

Atami. Described from four specimens collected from Mr. A. Koebele.

Subfamily II, MERISINÆ.

Genus **HOMOPORUS** Thomson.

Homoporus japonicus, new species.

Female. — Length, 2.8 mm. Bluish-green, the head and thorax punctate; antennæ light brown, the scape yellowish, the funicle joints 2-6 transverse; abdomen broadly oval, depressed, æneous, rounded at apex and not longer than the thorax; legs metallic brown-black, with the tips of the femora and the tibiæ and tarsi pale yellowish. Wings hyaline, with a large fuscous cloud beneath the marginal vein, the veins brown.

Type. — No. 7185, U. S. National Museum.

Atami. One specimen received from Mr. A. Koebele.

Subfamily IV, SPHEGIGASTERINÆ.

Tribe I, ASAPHINI.

Genus **PARASAPHES** Ashmead.

Parasaphes japonicus, new species.

♀. Length, 1.8 mm. Æneous black; flagellum brown; femora, except tips and the hind tibiæ reddish-brown, the tips of the femora, the front and the middle tibiæ and all tarsi pale yellowish; abdomen clavate, the petiole $2\frac{1}{2}$ times as long as thick; wings hyaline, the veins brown, the marginal vein very long and slender, nearly as long as the submarginal, the stigmal vein very short, subpetiolate, ending in a little knob.

Type. — No. 7186, U. S. National Museum.

Atami. Described from one specimen collected by Mr. A. Koebele.

Parasaphes flavipes, new species.

♀. Length, 1.6 mm. Head and thorax metallic greenish, shagreened; abdomen polished black, the petiole about twice as long as thick; scape of antennæ and the legs, including the coxæ, pale yellowish; flagellum long, brown; wings hyaline, the veins brownish, the marginal vein hardly two thirds the length of the subcostal, thickened towards apex, the stigmal vein thickened, much longer than in the previous species, more nearly as in the genus *Asaphes* Walk.

Type. — No. 7187, U. S. National Museum.

Formosa. Several specimens, labelled 1366, bred by Mr. A. Koebele.

Tribe II, PACHYNEURINI.

Genus **PACHYNEURA** Walker.**Pachyneura nawai, new species.**

♀. Length, 1.5–1.8 mm. Head and thorax dull bronzed green, finely sculptured; abdomen metallic black; legs, except the coxæ, testaceous, the tibiæ and tarsi pale yellowish; wings hyaline, the veins brown, the marginal vein about four times as long as thick.

Type. — No. 7168, U. S. National Museum.

Gifu (Mr. Y. Nawa); Atami (Mr. A. Koebele). Bred from an unknown Aphis.

Pachyneura mitsukurii, new species.

♀. Length, 1.4 mm. Head and thorax bluish-green, sculptured; abdomen ovate, æneous; scape of antennæ and the legs pale or yellowish-white, the flagellum brown; wings hyaline, the veins brown, the marginal vein about thrice as long as thick.

Type. — No. 7188, U. S. National Museum.

Japan. Four specimens received from Dr. Mitsukuri. The specimens are mounted on cardboard and I cannot see the color of the coxæ; they are probably metallic.

Pachyneuron gifuensis, new species.

♀. Length, 1 mm. Head and thorax æneous black; antennæ brown; coxæ black, the femora dark brown, the tips and the tibiæ and tarsi yellowish-white; wings hyaline, the veins brown, the marginal vein thrice as long as thick.

Type. — No. 7190, U. S. National Museum.

Gifu. Described from three specimens bred by Mr. Y. Nawa from an Aphis.

Tribe III, SPHEGIGASTERINI.

Genus **ACROCLISIS** Förster.**Acroclisis coccidivora, new species.**

♀. Length, 1.4 mm. Æneous-black, the head and thorax finely sculptured; antennæ brown, the scape yellowish; legs, except coxæ, honey-yellow, the knees, tips of tibiæ and the tarsi, whitish; wings hyaline, the veins light brownish, the stigmal vein a little shorter than the marginal.

Type. — No. 7191, U. S. National Museum.

Japan (exact locality not given). Described from five specimens, labelled No. 126, bred by A. Koebele from a Coccid.

Genus **TRIGONOASTRA** Ashmead.**Trigonogastra hakonensis, new species.** (Pl. VIII, Fig. 3.)

♀. Length, 1.5 mm. Head and thorax bronze green, finely sculptured; abdomen æneous petiolated, the body triangular, much as in *Perilampus*; antennæ

brown, the scape yellowish; legs, except the coxæ, honey-yellow, the knees, tibiæ towards apex, and the tarsi yellowish-white; wings hyaline, the veins light brownish, the marginal vein not short, the stigmal vein ending in a little knob, less than two thirds the length of the marginal, the postmarginal longer than the stigmal.

Type. — No. 7192, U. S. National Museum.

Hakone. One specimen received from Mr. A. Koebele.

Genus **CRYPTOPRYMNUS** Förster.

Cryptoprymnus japonicus, new species.

♀. Length, 3 mm. Head and thorax bronze green, closely punctulate; abdomen æneous black, petiolated, the petiole shagreened; antennæ brown, the scape yellowish; legs, except the coxæ and the femora, very pale yellowish, the coxæ metallic, the femora, except at apex, reddish brown; wings hyaline, the veins brownish, the stigmal vein two thirds the length of the marginal, ending in a little knob, the postmarginal almost as long as the marginal.

Type. — No. 7193, U. S. National Museum.

Japan (exact locality not given). Described from a single specimen, labelled No. 1266, received from Mr. A. Koebele, evidently bred, but the host is unknown.

Family LXX, ELASMIDÆ.

Genus **ELASMUS** Westwood.

Elasmus atamiensis, new species.

♀. Length, 2-2.1 mm. Æneous black, the pronotum bluish, the head with close thimble-like punctures, the thorax with a scaly punctuation; flagellum brown; scape of antennæ, the mandibles, a spot at extreme apex of the scutellum, and the legs, except the front coxæ basally, middle and hind coxæ and the hind femora, which are concolorous with the thorax, yellowish-white, the hairs on the hind tibiæ are arranged to form five cells or areas; wings hyaline, with a fuscous cloud across from the apex of the short stigmal vein.

Type. — No. 7195, U. S. National Museum.

Atami (Mr. A. Koebele). Many specimens.

Elasmus hakonensis, new species.

♀. Length, 1.8 mm. Greenish-blue, the head with thimble-like punctures, the thorax with a scaly punctuation; flagellum brown; scape, mandibles, spot above tegulæ, apex of scutellum, abdomen at base and beneath and a band above, and the legs except as hereafter noted, yellowish or yellowish-white, the apex of middle and hind femora broadly banded with black, the hind tibiæ with the hairs arranged on its outer face to form seven areas, the first row composed of four areas, the second of three; wings hyaline, faintly clouded across from the stigmal vein.

Type. — No. 7196, U. S. National Museum.

Hakone (Mr. A. Koebele).

Elasmus japonicus, new species.

♀. Length, 2.5 mm. Head and thorax yellowish, a spot on vertex, enclosing the ocelli, a spot on pronotum medially, a median spot on mesonotum posteriorly, a spot on the axillæ, a large spot on disk of scutellum and the metanotum black; abdomen reddish-brown, the apex and three spots on basal segment black; flagellum brown; legs yellowish-white, with a black hair-line on their superior edge, the hind tibiæ with the hairs arranged on its outer face to form at least nine areas; wings hyaline, the veins brown.

Type. — No. 7197, U. S. National Museum.

Gifu. Described from four specimens received from Mr. Y. Nawa.

Family LXXI, EULOPHIDÆ.**Subfamily I, ENTEDONINÆ.****Tribe III. ENTEDONINI.****Genus PLEUROTROPIS Förster.****Pleurotropis atamiensis, new species.**

♀. Length, 1 mm. Æneous, the head above, the disk of the metanotum, and the metapleura, with a metallic greenish-tinge, vertex punctate, the mesonotum scaly-punctate; flagellum brown, pubescent, the funicle joints moniliform; legs æneous-black, the tips of the tibiæ and the tarsi, whitish, the hind femora with a metallic bluish tinge; wings hyaline, the very long marginal vein and the very short subcostal stigmal vein light brown; abdomen conic-ovate, petiolated, with a bluish tinge, the petiole about four times as long as thick, the first segment of the abdomen occupies about half the whole surface.

Type. — No. 7198, U. S. National Museum.

Atami (Mr. A. Koebele). Two specimens.

Genus DEROSTENUS Westwood.**Derostenus bifoveolatus, new species.**

♀. Length, 1.2 mm. Metallic peacock blue on vertex of head and disk of the thorax, otherwise dark bluish, except the pronotum which is brassy; tarsi, except last joint, white; mesonotum and the scutellum delicately reticulated with delicate grooved lines, the mesonotum with two umbinate punctures posteriorly just in front of the scutellum; wings hyaline, the nervures brown, the marginal vein very long, the stigmal vein very short.

Type. — No. 7199, U. S. National Museum.

Atami (Mr. A. Koebele). One specimen.

Derostenus nawai, new species.

♂, ♀. Length, 1.3 mm. Dark blue, the disk of the thorax and the abdomen æneous, tarsi, except last joint, white; mesonotum normal, without the foveæ at base, wings hyaline, the veins brown; abdomen in female conic-ovate, as long as the

thorax, the first body segment occupying half the whole surface, in male, short-oval, not more than half the length of the thorax, the first body segment occupying two thirds the whole surface.

Type. — No. 7200, U. S. National Museum.

Gifu (Mr. Y. Nawa).

***Derostenus mitsukurii*, new species.**

♀. Length, 1-1.2 mm. Dark blue, the head above and the disk of the thorax æneous, the abdomen dark blue, the thorax above and the scutellum delicately reticulated; flagellum brown; legs, except the coxæ, pale or yellowish-white; wings hyaline, the veins light brown; abdomen oval, only about two thirds the length of the thorax, the first body segment occupying most of the surface, the following very short, retracted.

Type. — No. 7201, U. S. National Museum.

Japan (Dr. Mitsukuri). Many specimens.

Tribe IV, PEDIOBINI.

Genus *NESOMYIA* Ashmead.

***Nesomyia albipes*, new species.**

♀. Length, 2 mm. Metallic blue-green, the cheeks and the clypeus brassy, the abdomen conic-ovate, æneous black, the middle lobe of the mesonotum and the scutellum scaly punctate, the parapsidal furrows indicated by depressions only; flagellum black, finely pubescent; legs, except coxæ and the last joint of the tarsi, waxy-white; wings hyaline, the disk of the front wings with a subfuscous cloud, the veins light brown, the marginal vein very long, the stigmal vein very short, ending in a little knob, the postmarginal vein long.

Type. — No. 7202, U. S. National Museum.

Atami (Mr. A. Koebele). One specimen.

***Nesomyia cinctiventris*, new species.**

♀. Length, 1.1 mm. Blue, the head behind and on the clypeus, and the tip of the abdomen æneous, the abdomen conically pointed, as long or a little longer than the head and thorax united with a transverse yellowish or whitish band just beyond the base; scape and legs waxy-white, the flagellum light brownish; wings hyaline, the veins pale.

Type. — No. 7739, U. S. National Museum.

Gifu (Mr. Y. Nawa). Two specimens.

Subfamily II, APHELININÆ.

Genus *APHELINUS* Dalman.

***Aphelinus japonicus*, new species.**

♀. Length, 0.6 mm. Honey-yellow, the eyes light brown, the occiput above dusky, the scutellum, post-scutellum and a spot on each side of the middle bluish-

black; antennæ, legs and abdomen beneath yellowish-white; wings hyaline, the veins pale yellowish.

Type. — No. 7203, U. S. National Museum.

Atami (Mr. A. Koebele). Two specimens.

Subfamily III, TETRASTICHINÆ.

Tribe II, TETRASTRICHINI.

Genus **TETRASTICHODES** Ashmead.

Tetrastichodes pallidipes, new species.

♀. Length, 1.6 mm. Bluish-æneous, the middle mesothoracic lobe with a decided metallic greenish tinge, smooth and shining; a large rounded spot on disk of abdomen, the scape of the antennæ and the legs, pale yellowish or yellowish-white; flagellum brown; wings hyaline, iridescent, the veins pale; abdomen conic-ovate, fully as long as the head and thorax united.

♂. Length, 0.8 mm. Æneous black, the flagellum longer, light brown, clothed with some long sparse hairs, the legs waxy white.

Type. — No. 7204, U. S. National Museum.

Hakone (Mr. A. Koebele).

Genus **TETRASTICHUS** Haliday.

Tetrastichus hakonensis, new species.

♀. Length, 1.5 mm. Robust, æneous black, impunctate; flagellum dark brown, the first joint about thrice as long as thick, the others gradually becoming shorter; legs black, with the trochanters at apex, apices of the femora and all tibiae and tarsi pale yellowish; wings hyaline, the veins pale.

Type. — No. 7205, U. S. National Museum.

Hakone (Mr. A. Koebele).

Tetrastichus atamiensis, new species.

♀. Length, 1 mm. Black with a faint bluish tinge in certain lights; scape of antennæ and the legs, except as noted, yellowish-white, coxæ, a spot on the trochanters and the hind femora, on the basal half, black; abdomen ovate, not longer than the thorax; wings hyaline, the veins pale yellowish.

Type. — No. 7206, U. S. National Museum.

Atami (Mr. A. Koebele).

Tetrastichus tricolor, new species.

♀. Length, 1.8–2 mm. Brownish-yellow, the occiput and a spot on the lateral mesothoracic lobes posteriorly black, a large spot on the middle mesothoracic lobe blue-black; abdomen except a streak along the middle of the venter, æneous black; flagellum brownish; wings hyaline, the veins pale.

Type. — No. 7207, U. S. National Museum.

Atami and Hakone (Mr. A. Koebele). Many specimens.

Subfamily IV, ELACHERTINÆ.

TRIBE I, EUPLECTRINI.

Genus **EUPLECTRUS** Westwood.**Euplectrus japonicus**, new species.

♂. Length, 1.5 mm. Black and shining, the abdomen with a yellow spot at base above, brownish-yellow beneath; antennæ and legs pale yellowish, the front and middle coxæ yellowish-white, the hind coxæ black; wings hyaline, the veins pale.

The head is highly polished, impunctate, clothed with some sparse long hairs; the pedicel is obconical, a little longer than thick at apex; first funicle joint stouter, about $1\frac{1}{2}$ times as long as thick, the second hardly longer than thick, the third and fourth stouter, a little wider than long; club short, ovate, stouter; the mesonotum is finely rugulose but without a median carina posteriorly, the scutellum including the axillæ and the metathorax are perfectly smooth, highly polished, the latter with a sharp median carina.

Type. — No. 7208, U. S. National Museum.

Japan. Described from a single specimen, labelled No. 1303, bred by Mr. A. Koebele, from an unknown noctuid larva.

Euplectrus nigromaculatus, new species.

♀. Length, 1.6 mm. Brownish-yellow, the eyes brown, a transverse band on occiput, one on the front of the pronotum and one on the front of the mesonotum, a spot on the lateral mesothoracic lobe, the metathorax, and spots on the lateral margins of the abdomen, black; scape and legs yellowish-white; flagellum brownish; wings hyaline, the marginal and postmarginal veins brown, the submarginal and the stigmal veins yellowish.

Type. — No. 7209, U. S. National Museum.

Hakone (Mr. A. Koebele). Many specimens.

Tribe II, OPHELININI.

Genus **SYMPIESOMORPHA** Ashmead.**Sympiesomorpha japonica**, new species. (Pl. VIII, Fig. 5.)

♀. Length, 2 mm. Brownish-yellow, the middle of the head, the prothorax above, the apex of the scutellum and the metanotum, black; eyes brown-black; abdomen æneous, beneath and sometimes the sutures above pale; scape of antennæ and the legs yellowish-white; flagellum brown; wings hyaline, the veins pale-yellowish.

Type. — No. 7220, U. S. National Museum.

Gifu (Mr. Y. Nawa). Two specimens.

Genus **OPHELINOIDEUS** Ashmead.**Ophelinoideus japonicus**, new species. (Pl. VIII, Fig. 4.)

♀. Length, 3.5 mm. Dull bronzed green, closely punctate, the head in front with a bluish green tinge, the abdomen æneous; scape of the antennæ, tips of troch-

anters, tips of the femora and all tibiae and tarsi except the last joint, pale yellowish; wings hyaline, the veins brown.

Type. — No. 7211, U. S. National Museum.

Hakone (Mr. A. Koebele). Three specimens.

Tribe III, ELACHERTINI.

Genus **ELACHERTUS** Spinola.

Elachertus atamiensis, new species.

♀. Length, 1.5 mm. Æneous black, smooth and shining, the middle mesothoracic lobe and the scutellum with a metallic greenish tinge, and the lateral mesothoracic lobes and the axillæ with a bluish tinge; scape of antennæ and the legs pale honey-yellow, the hind coxæ usually metallic; flagellum brown-black, the funicle joints moniliform; wings hyaline, the veins pale brownish.

Type. — No. 7212, U. S. National Museum.

Atami (Mr. A. Koebele). Three specimens.

Elachertus basilaris, new species.

♀. Length, 1.7 mm. Æneous black, impunctate, the abdomen with a yellow band at base; scape of antennæ and the legs from the tips of the femora downwards honey-yellow, the coxæ and femora æneous black; flagellum light brown, the funicle joints, except the last, longer than wide; wings hyaline, the veins brown.

Type. — No. 7213, U. S. National Museum.

Gifu (Mr. Y. Nawa).

Subfamily V, EULOPHINÆ.

Tribe I, EULOPHINI.

Genus **SYMPIESIS** Förster.

Sympiesis mikado, new species.

♀. Length, 4-5 mm. Head and thorax closely punctured, metallic green, the metanotum and the long conically-pointed abdomen, which is more than twice as long as the head and the thorax united, are bottle blue, occasionally tinged with green; scape of antennæ and the legs, except the hind coxæ, which are gold-green and sculptured, honey-yellow; wings hyaline, the veins brown.

Type. — No. 7214, U. S. National Museum.

Atami (Mr. A. Koebele). Many specimens.

Genus **EULOPHUS** Geoffroy.

Eulophus albitarsis, new species.

♀. Length, 2 mm. Æneous black, sometimes bluish-green, the mesothorax shagreened, the scutellum more delicately shagreened, the axillæ smooth, in marked contrast with the mesonotum and the scutellum; legs black, except an annulus at base of front and middle tibiae and all tarsi which are honey yellow, the last tarsal joint fuscous; wings hyaline, the veins brown.

Type. — No. 7215, U. S. National Museum.

Atami (Mr. A. Koebele). Four specimens.

***Eulophus striatipes*, new species.**

♀. Length, 1.6 mm. Greenish-blue, the thorax shagreened; legs, except the coxæ and a stripe on femora above, pale yellowish or yellowish-white, the coxæ metallic, the femora with a delicate fuscous stripe above; wings hyaline, the veins brownish-yellow; abdomen oblong-oval, depressed, as long as the head and thorax united, the sheaths of the ovipositor slightly projecting. The antennæ are broken off and cannot be described.

Type. — No. 7216, U. S. National Museum.

Atami (Mr. A. Koebele). One specimen.

***Eulophus japonicus*, new species.**

♀. Length, 2 mm. Head and thorax closely punctured, metallic green, the abdomen long ovate, æneous black; scape of antennæ, trochanters, apices of femora, the base and apex of tibiæ and all tarsi, except the last joint, yellowish-white; flagellum brown-black; wings hyaline, the veins brown, the marginal vein a little more than twice as long as the stigmal vein.

Type. — No. 7217, U. S. National Museum.

Japan (exact locality unknown). One specimen received from Mr. A. Koebele.

Family LXXII, TRICHOGRAMMIDÆ.

Genus TRICHOGRAMMA Westwood.

***Trichogramma japonicum*, new species.**

♀. Length, 0.5–0.6 mm. Piceous black, shining; palpi white; scape of antennæ pale yellowish, the pedicel and the flagellum brownish-yellow; legs yellowish-white, immaculate; wings hyaline, with delicate hair-lines, the venation light brownish, the stigmal vein as long as the marginal, oblique, scarcely bent; abdomen sessile, ovate, not longer than the head and thorax united, flat above, convex beneath and pointed at apex, the ovipositor slightly projecting beyond the tip of the abdomen.

Type. — No. 7218, U. S. National Museum.

Gifu. Several specimens bred by Mr. Y. Nawa from unknown lepidopterous eggs; they are mounted on cardboard, together with a *Telenomus*, and labelled No. 78.

EXPLANATION OF PLATES VII AND VIII.

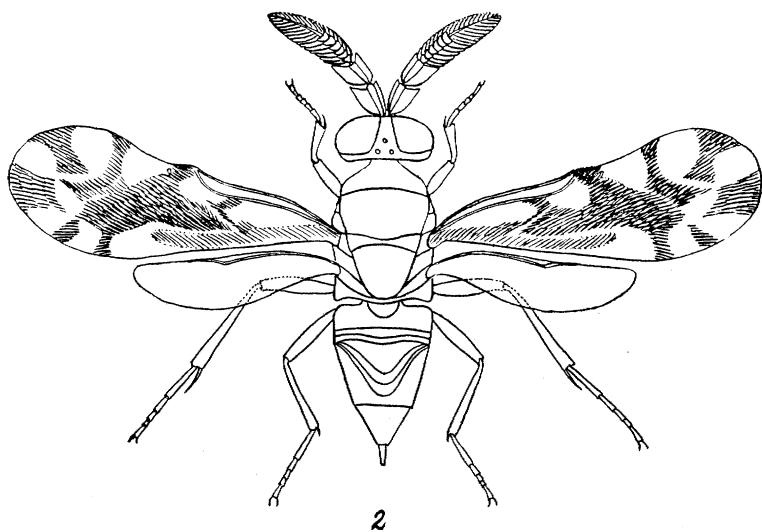
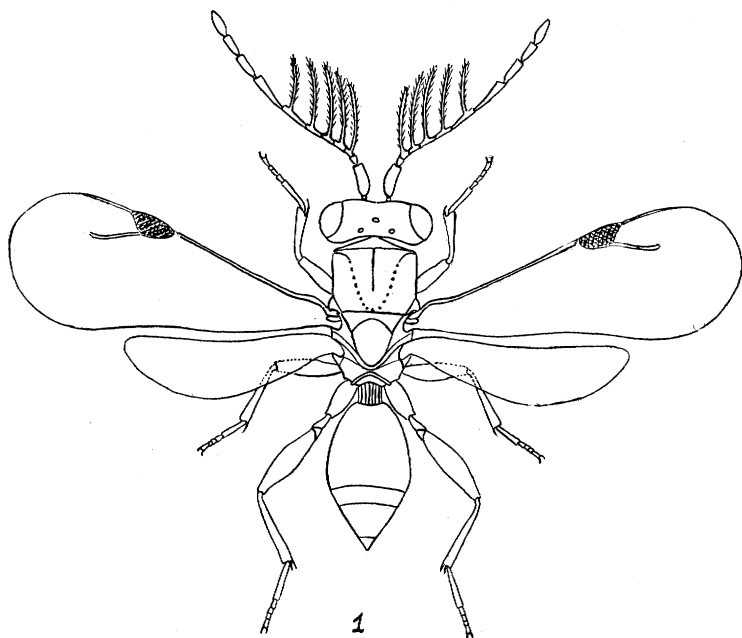
Fig. 1. *Dendrocercus ratzeburgi* Ashmead (Jour. N. Y. Ent. Soc., XII, 70, 1904).

Fig. 2. *Cerapteroceroides japonicus* Ashmead.

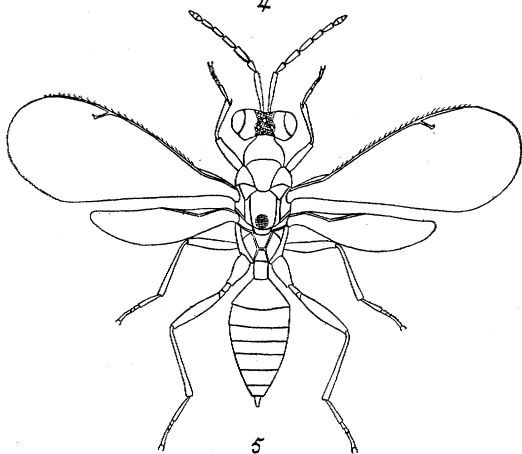
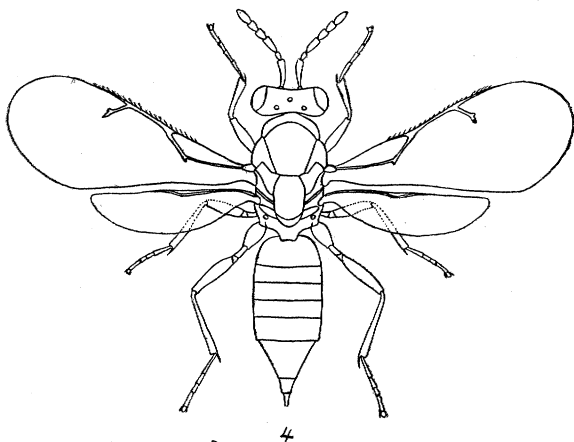
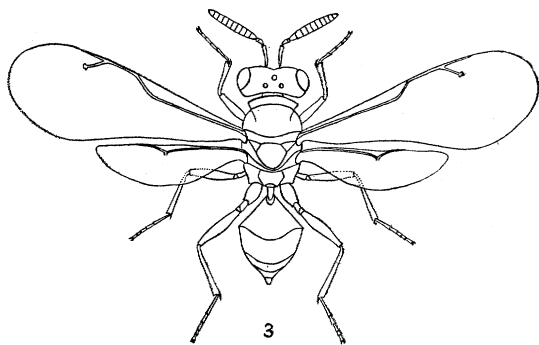
Fig. 3. *Trigonogastra hakonensis* Ashmead.

Fig. 4. *Ophelinoides japonicus* Ashmead.

Fig. 5. *Sympiersmorphe japonica* Ashmead.



Hymenoptera of Japan.



Hymenoptera of Japan.